

AMENDMENTS TO THE CLAIMS:

The listing of claims will replace all prior versions, and listings of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) A replaceable module for a printing apparatus with programmable software controls, the module comprising:
 - a internal memory for holding stored instructions;
 - a peripheral memory holding a software upgrade for the printing apparatus programmable software controls;
 - a communications interface for exchanging information with the printing apparatus; and,
 - a microprocessor connected to the internal memory, the peripheral memory and the communications interface, the microprocessor performing the stored instructions to compare currently installed software and current machine status with available software upgrades to determine if the software upgrade is appropriate for installation and if an upgrade is appropriate, then install the software upgrade into the printing apparatus via the communications interface when the replaceable module is installed in the printing apparatus by causing said printing apparatus to idle ~~ceasing operation of the printing apparatus\~~, upgrading software by extracting necessary components from a web based source or from an internal memory source, monitor progress of the upgrade, report any faults, contact service personnel if the upgrades is not successfully completed, and return the printing apparatus to normal operation when the software upgrade is complete so that ~~no other individual needs to perform the software upgrade for the printing apparatus~~ is inhibited from being repeated.
2. (Original) The replaceable module of claim 1, wherein the communications interface comprises a wired communication element.
3. (Original) The replaceable module of claim 1, wherein the communications interface comprises a wireless communication element.

4. (Original) The replaceable module of claim 1, further comprising a peripheral memory interface, where the microprocessor is connected to the peripheral memory through the peripheral memory interface.

5. (Previously Presented) The replaceable module of claim 4, where the peripheral memory comprises flash memory.

6. (Original) The replaceable module of claim 5, where the peripheral memory comprises flashcards.

7. (Original) The replaceable module of claim 4, where the peripheral memory comprises nonvolatile integrated circuit chip memory.

8. (Original) The replaceable module of claim 4, where the peripheral memory comprises bubble memory.

9. (Currently Amended) In a printing apparatus, a method of operating a replaceable module, the method comprising:

installing the replaceable module in the printing apparatus:

allowing a processor element on board the replaceable module to interrogate the printing apparatus, wherein the interrogating includes identifying previously installed replaceable modules;

determining which software components in the printing apparatus need to be upgraded by comparing software currently installed in the printing apparatus with available software upgrades;

accessing internal, non-consumable memory to retrieve and load any necessary software code components for an upgrade;

installing the software code into the printing apparatus by the processor element in the replaceable module so that a field engineer or other individual need not perform the software upgrade for the printing apparatus;

monitoring the progress of the software upgrade;

reporting any fault occurring during the upgrade;

placing a service call if the upgrade is unsuccessful; and

returning the printing apparatus to normal operating mode when the software upgrade is complete.

10. (Original) The method of claim 9 wherein the processor element is a microprocessor.

11. (Original) The method of claim 9 wherein the memory that is accessed is internal.

12. (Original) The method of claim 9 wherein the memory that is accessed is external.

13. (Original) The method of claim 12 wherein the memory is accessed via a network connection.

14. (Currently Amended) The method of claim 13 wherein the network connection is comprised of ~~comprised~~ of the Internet.

15. (Original) The method of claim 13 wherein the network connection access is accomplished by a wireless communication element.

16. (Currently Amended) In a printing apparatus, a method of operating a replaceable module having a processor element on board the replaceable module, the method comprising:

installing the replaceable module in the printing apparatus;

placing the printing apparatus into diagnostic mode;

allowing a processor element on board the replaceable module to interrogate the printing apparatus;

interrogating said printing apparatus by comparing currently installed software and current machine status with available software upgrades;

determining from the interrogation which software components in the printing apparatus need to be upgraded;

scheduling as determined by the processor element when a software upgrade should occur;

accessing memory as directed by the processor element in order to retrieve and load necessary software code components to perform an upgrade;

installing the software code into the printing apparatus by the processor element in the replaceable module;

monitoring the progress of the software upgrade;

reporting any fault occurring during the upgrade;

placing a service call if the upgrade is unsuccessful; and

returning the printing apparatus to normal operating mode when the software upgrade is complete.

17. (Original) The method of claim 16 wherein the processor element is a microprocessor.

18. (Original) The method of claim 16 wherein the memory that is accessed is internal.

19. (Original) The method of claim 16 wherein the memory that is accessed is external.

20. (Original) The method of claim 19 wherein the memory is accessed via a network connection.

21. (Original) The method of claim 19 wherein the memory is comprised of flashcards.

22. (Original) The method of claim 20 wherein the network connection access is accomplished by a wireless communication element.

23. (Original) The method of claim 16 wherein the interrogation further comprises gathering machine and software version indicia, model number, serial number, and other identifying information, as would be desirable for completing an inventory of machines in the field.

24. (Original) The method of claim 23 wherein the identifying information is passed via the network connection.

25. (Original) The method of claim 23 wherein the identifying information is stored in memory on the replaceable module.